[redacted]

[redacted]

ILLEGIB

15 December 1964
HH:avw-479

MEMORANDUM FOR THE RECORD

SUBJECT: Description of Input Formats for Edge Trace Computer Program

STATINTL

STATINTL BY: [redacted]

The following is a description of the data cards called by the edge trace program. The cards are discussed in the order in which they are called by the program.

Identification

Spaces 1 - 72 provide alphanumeric identification which appears at the top of each page of the output.

Frequency Control Card

Spaces 1 - 5 contain the integer equal to the number of specific frequencies (which appear on the following cards) for which the transfer function is determined by interpolation. The number is dimensioned at 100, but should be limited to 50 to provide neat output. Spaces 6 - 9 are blank. Space 10 is 3. Spaces 11 - 72 are blank.

Frequency Values

Specific values of spatial frequencies for which the value of the transfer function is desired are printed. Each card contains 14 fields of five spaces (1 - 5, 6 - 10, . . . , 66 - 70). Spaces 71 and 72 are blank. Each field contains one frequency in fixed point. Enough cards are used such that all frequencies desired are called.

First Case

Each case consists of several cards, the first of which is a control card, and the remaining contain the density values of the sampled edge trace.

Control Card

Spaces 1 - 30 provide alphanumeric identification of the specific case and appears on each output page for each page of the case. Spaces 31 - 35 contain the

integer equal to the number of density values to appear on the cards that follow for this case. Spaces 36 - 45 contains the scale factor of the edge trace (number of data points/mm) in fixed point. The following three fields determine the values of film gamma for which the line-spread function and passband are computed. The values of γ are determined from:

$$\gamma_j = B + jC \qquad (j = 1, 2, \ldots M) \quad (M \leq 20)$$

where the values of B, C and M are specified on the card:

Spaces	Format	Parameter
46 - 55	Fixed	B
56 - 65	Fixed	C
66 - 70	Integer	M

Spaces 71 - 72 are blank.

Density Values

Each card contains ten fields of seven spaces (1 - 7, 8 - 14, ..., 64 - 70). Each field contains a density sample in fixed point, with successive fields containing in order, the equally spaced set of density values. Spaces 71 and 72 are blank. As with the frequency value discussed above, as many cards are used as required.

Smoothing Control Card

Note: n must be odd.

STATINTL

Spaces 1 - 9 contain the integer which determines the amount of smoothing of the densities. Specifically it is the integer n appearing in [redacted] Rept VE-1867-C-1 on page 50. Spaces 10 - 14 contain the integer equal to the number of cases to be smoothed with integer n of the previous field. Spaces 15 - 72 are blank.

Second Case

ILLEGIB

Each case now follows and has the same format as the first case described above. Smoothing control cards are not needed after these cases, until it is desired to change the amount of the smoothing. A new smoothing control card is then required directly after the first case to be smoothed with the new integer n.

Finish

Spaces 1 - 30 are blank. Spaces 31 - 35 contain an integer greater than 1500. Spaces 36 - 72 are blank.

[redacted]

STATINTL

STATINTL

Ext. 562

[redacted]RDP78B04747A000200010022-5